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LIVESTOCK
COSTS AND RETURNS
FROM
FARM COST ACCOUNTS

27 FARMS-1979

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REPORTS
from
FARM COST ACCOUNTS

27 Farms, 1979

Enterprise data from the 1979 New York Farm Cost Account Project have been published in the following reports. Additional copies may be obtained from County Extension offices or directly from the Department of Agricultural Economics, Cornell University, Ithaca, New York 14853.

Overhead Costs	A.E. Res.	80-23
Livestock Costs and Returns	A.E. Res.	80-24
Field Crops Costs and Returns	A.E. Res.	80-25
Fruit and Vegetable Crops Costs and Returns	A.E. Res.	80-26

Livestock Costs and Returns, A.E. Res. 80-24

- Contents -

	Page
Introduction	1
Summary of Cost Account enterprises	6
Rates of return compared with other years	7
Cows - All enterprises	9
Cows - Stanchion herds and Freestall herds	12
Heifers	16

INTRODUCTION

The New York Farm Cost Account Project is a research project which is a part of the Cornell Agricultural Management Information System (CAMIS). Since 1914 data have been published from detailed enterprise records kept by New York farmers in cooperation with the Department of Agricultural Economics at Cornell University. These publications provide College and field staff as well as farmers and others interested in agriculture with a continuous record of economic changes taking place on New York farms.

The farms are located in most of the farming areas of the State. They are generally well-managed, full-time, commercial farm businesses. They are representative of the "better" farms in New York.

The reports present the results of individual enterprises and the averages of the enterprise costs and returns for all farms. They show not only the averages of cost and returns but also indications of the variations and reasons for them. The factors for individual enterprises are arranged according to size of enterprise. The annual averages of the various factors are not averages of average costs but are weighted by the size of the enterprise.

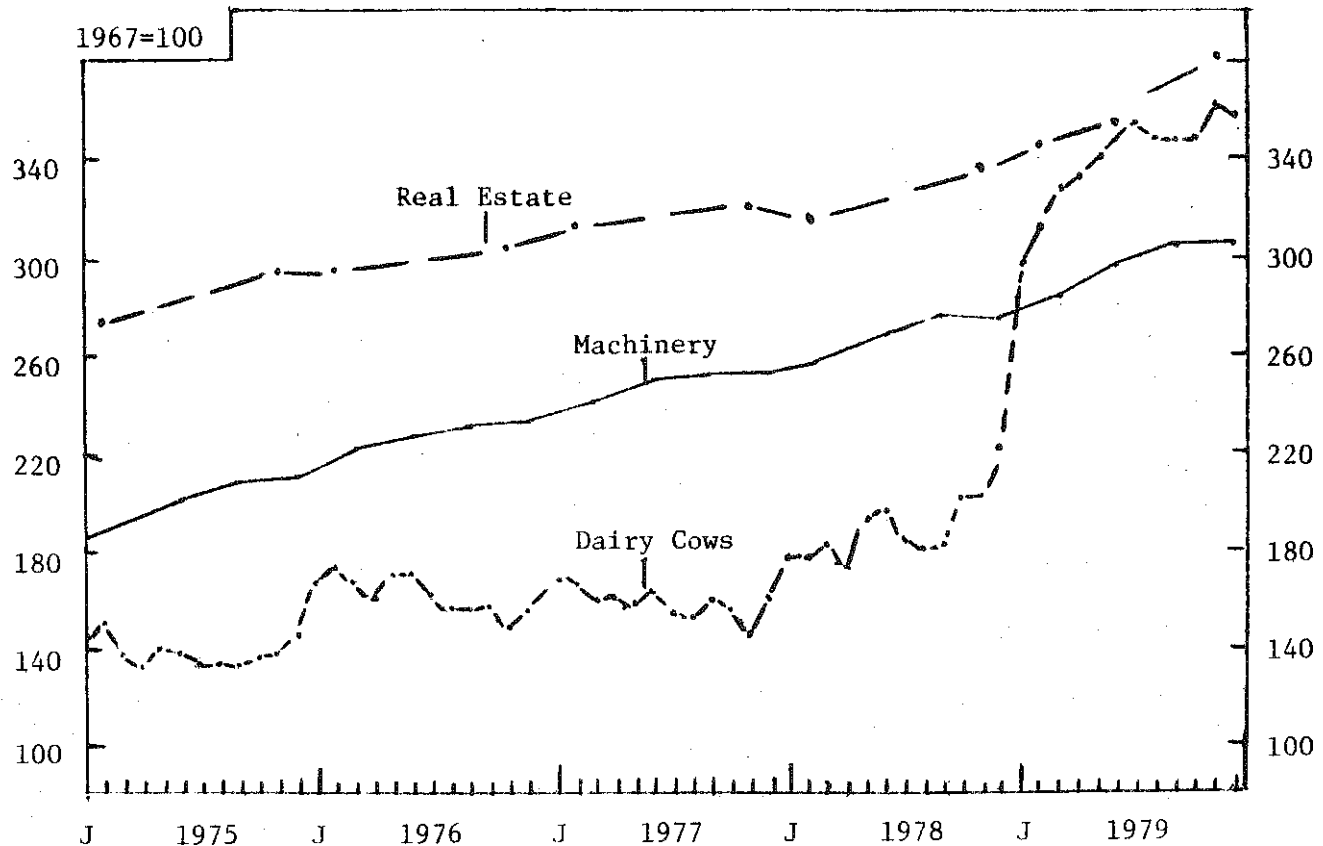
Acknowledgements

The project was under the supervision of Darwin Snyder, who also did the field work necessary to complete the records. Editing and processing the data, closing the books, and the preparation of these reports was done by Barbara Wilcox and Florence Blodgett assisted by Oneta Shipe. Mary Chaffee typed and assembled the reports and assisted in processing the data.

The material on pages 2, 3, and 4 of this report was taken from A.E. Res. 80-16, Dairy Farm Management, Business Summary, New York 1979 by Stuart F. Smith.

Special acknowledgement is due the group of farmers who are willing to keep the detailed records so essential to such a system of enterprise cost accounting. Without their continuing efforts and willingness to provide this information, this important and accurate source of real farm data would not exist.

Prices VALUE OF NEW YORK FARM REAL ESTATE, DAIRY COWS & MACHINERY
1975-1979



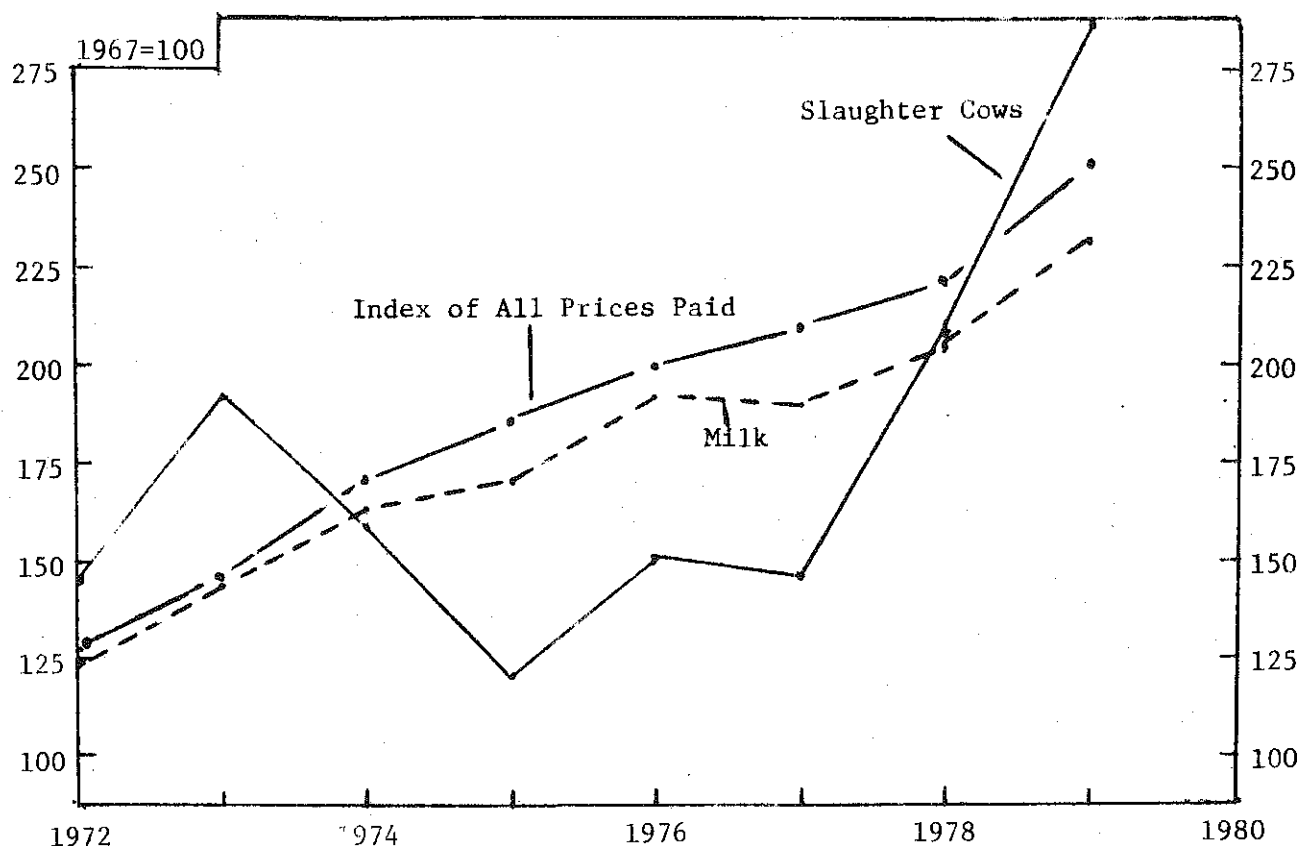
Price changes have a direct affect on the inventory values on New York dairy farms. Real estate and machinery prices have risen steadily during the past five years. Dairy cow prices dropped during 1974, rose sharply in late 1975, fluctuated throughout 1976 and 1977, and then jumped 62 percent in 1978. Dairy cow prices continued upward in 1979 and were reported at \$1,105 for December, or 38 percent above the December 1978 price. From 1967 to 1979, machinery prices increased 205 percent, dairy cows 256 percent and real estate increased 281 percent.

Table 1. REPORTED VALUES OF DAIRY FARM INVENTORY ITEMS, 1975-1979

Year*	N.Y. Dairy Cows		Machinery		N.Y. Farm Real Estate	
	Value/Head	1967=100	1967=100		Value/Acre	1967=100
1975	(Dec.) \$450	145	(Dec.) 222	(Nov.) \$543	294	
1976	(Dec.) 485	156	(Dec.) 233	(Nov.) 562	304	
1977	(Dec.) 495	160	(Dec.) 253	(Nov.) 593	320	
1978	(Dec.) 800	258	(Dec.) 276	(Nov.) 629	339	
1979	(Dec.) 1105	356	(Dec.) 305	(Nov.) 704	381	
Percent change:						
1975 to 1976	+ 8%		+ 5%	+ 3%		
1976 to 1977	+ 3%		+ 9%	+ 5%		
1977 to 1978	+62%		+ 9%	+ 6%		
1978 to 1979	+38%		+ 9%	+12%		

* Latest figure reported for year, i.e., November for real estate.

PRICES RECEIVED AND PAID BY NEW YORK DAIRY FARMERS, 1972-1979

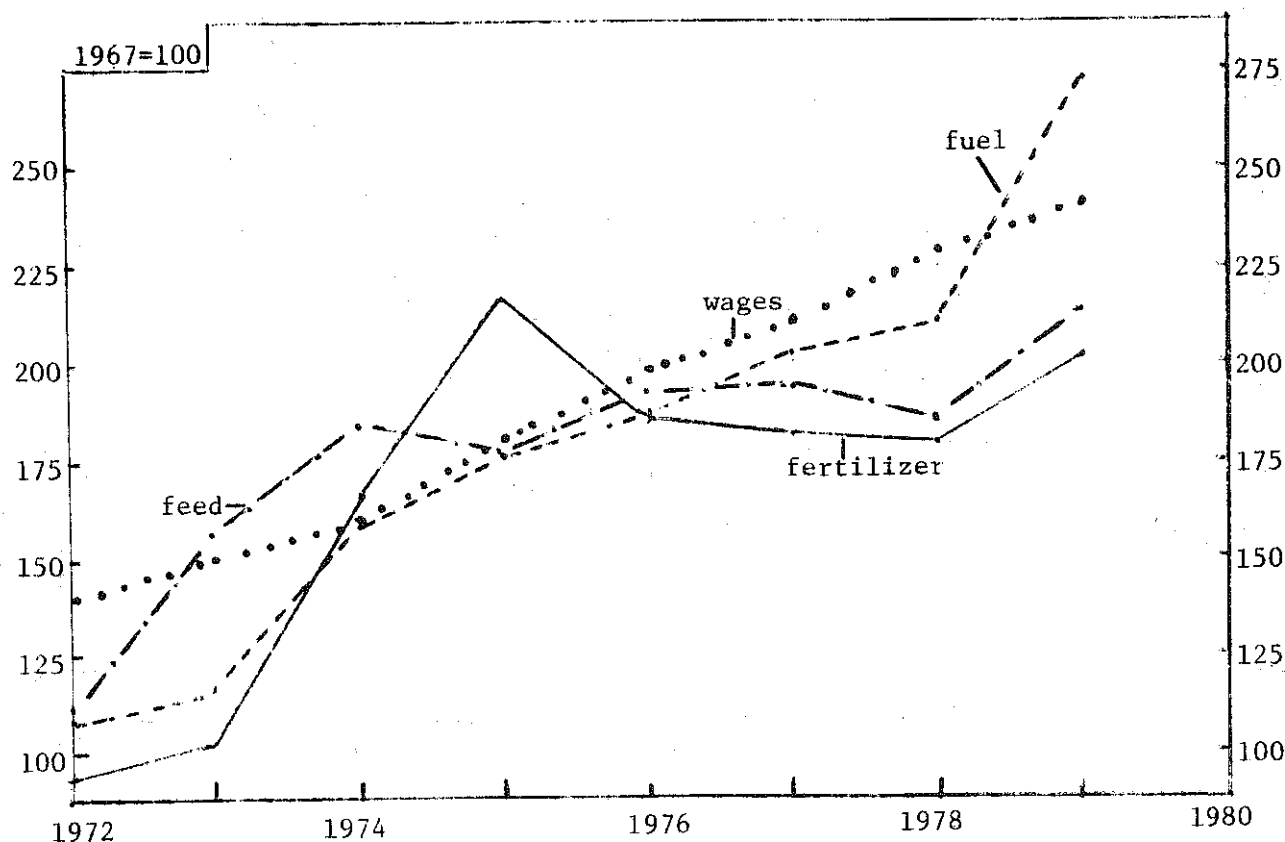


The relationship of prices received to prices paid is a major factor in determining farm income. The graph above shows the trend in prices since 1972 for milk, cull cows, and the index of prices paid by New York dairy farmers. Milk prices have lagged behind all prices paid since 1971. Slaughter cow prices follow the beef cycle and have risen sharply since 1977. In 1979, prices paid rose 14 percent, milk three percent, and slaughter cows 38 percent.

Table 2. PRICES RECEIVED & PAID BY NEW YORK DAIRY FARMERS, 1967-1979

Year	Milk 3.5% B.F. (cwt.)	Slaughter Cows (cwt.)	Prices Paid by N.Y. Dairy Farmers (1967=100)	Monthly Farm Price Per 100 Lbs. of Milk, 1979	
1967	\$5.07	\$17.10	100	January	\$11.49
1970	5.89	20.70	112	February	11.57
1971	6.02	21.20	120	March	11.12
1972	6.25	24.48	126	April	10.95
1973	7.30	32.80	146	May	10.93
1974	8.24	27.40	172	June	11.03
				July	11.60
1975	8.64	20.60	186	August	12.23
1976	9.71	25.57	200	September	12.51
1977	9.61	25.09	210	October	12.64
1978	10.38	35.58	221	November	12.62
1979	11.74	49.27	252	December	12.25

PRICES PAID BY FARMERS FOR SELECTED ITEMS, 1972-1979



Prices of major farm inputs have all increased since 1972 but only wages paid by farmers have increased at a fairly constant rate. Feed prices rose 15 percent in 1979 following a four year period of stable prices. Fertilizer prices increased 12 percent in 1979 after declining for three consecutive years. Fuel prices jumped 29 percent last year following four years of single digit increases.

Table 3. PRICES PAID BY FARMERS FOR SELECTED ITEMS, 1973-1979

Year	Index 1967=100				
	Feed	Fertilizer	Fuel	Wages	Taxes
1972	112	94	108	140	142
1973	157	102	116	150	146
1974	185	167	159	160	154
1975	177	217	177	180	166
1976	192	185	187	199	176
1977	194	182	203	212	195
1978	186	180	212	229	210
1979	213	202	273	241	221
Percent increase:					
1972 to 1978 (ave./year)	13%	16%	22%	10%	8%
1978 to 1979	15%	12%	29%	5%	5%

SOURCE: U.S.D.A. - Agricultural Prices

Growing Conditions

Table 1. TEMPERATURE, PRECIPITATION AND GROWING SEASON
Selected Stations, New York, 1941-70 and 1979

Station	Average temperature		Precipitation				Length of growing season*	
	May - Sept.		May - Sept.		Total Annual		growing season*	
	1941-70	1979	1941-70	1979	1941-70	1979	1947-67	1979
	degrees		inches				days	
Albany	65.7	65.7	15.4	15.6	33.4	37.1	---	151
Alfred	61.8	60.2	17.2	17.2	36.7	36.8	125	125
Aurora	64.6	63.2	13.8	17.5	40.0	40.9	160	176
Batavia	64.1	65.1	15.3	20.2	32.6	40.0	154	157
Binghamton	63.3	62.1	17.9	14.8	37.4	36.7	154	175
Canton	63.0	62.2	16.5	19.6	34.5	38.4	127	114
Glens Falls	----	63.5	17.8	16.1	39.3	38.2	---	118
Ithaca	63.8	62.3	17.2	16.0	34.8	36.2	145	140
Lowville	62.5	62.7	16.5	17.1	38.5	41.1	123	142
Utica	63.5	64.0	18.1	15.2	40.6	40.8	157	178

* Days between the last temperature of 32 degrees in the spring and the first in the fall.

Source: Climatological Data, NOAA, Environmental Data Service, Annual Summary, New York, 1979, Vol. 91, No. 13 and unpublished data.

Weather is a factor to be considered when studying a farm business for a specific year. The growing conditions have a marked effect on the crops for that year. It is for this reason that data are presented on the growing conditions for 1979 and for the period 1941-70.

In general, the growing season produced cooler than normal temperatures especially in the Southern Tier and North Country areas of the State. These areas also had a shorter than average growing season although the Lowville station recorded more frost free days than normal. Temperatures averaged higher than normal in the Utica and Batavia areas which was also related to their abnormally long growing season. Precipitation for the growing season was above normal in central and western New York and fairly normal elsewhere. However, the seasonal distribution was such that June and July were dryer and September was wetter than normal in most areas of the State.

Data are presented for ten weather stations. Rainfall is reported by months for the growing season (Table 2).

Table 2. GROWING SEASON RAINFALL
Selected Stations, New York, 1941-70 and 1979

Station	May		June		July		August		September	
	1941-70		1941-70		1941-70		1941-70		1941-70	
	1979	1979	1979	1979	1979	1979	1979	1979	1979	1979
	inches									
Albany	3.26	4.13	3.00	1.94	3.12	2.78	2.87	2.67	3.12	4.05
Alfred	3.76	3.47	3.76	2.48	3.73	2.72	3.00	3.30	2.93	5.26
Aurora	2.98	3.22	2.54	2.51	3.03	2.34	2.81	4.22	2.46	5.24
Batavia	3.17	5.05	2.69	2.07	3.05	3.01	3.50	3.99	2.87	6.08
Binghamton	3.83	4.26	3.59	0.98	3.83	1.45	3.61	2.44	3.02	5.70
Canton	3.37	3.26	2.91	1.50	3.43	1.68	3.47	6.01	3.31	7.19
Glens Falls	3.63	4.37	3.77	1.04	3.68	3.86	3.42	2.33	3.31	4.54
Ithaca	3.55	2.11	3.40	2.66	3.67	2.18	3.49	4.76	3.08	4.28
Lowville	3.42	3.99	2.94	0.97	3.26	1.17	3.58	5.17	3.31	5.77
Utica	3.52	3.42	3.55	1.25	4.17	1.31	3.54	3.71	3.32	5.48

Source: Climatological Data, NOAA, Environmental Data Service, Annual Summary, New York, 1979, Vol. 91, No. 13 and unpublished data.

YIELDS FOR CROPS AND LIVESTOCK
New York State and Farm Cost Account Averages

Item	Unit	New York State*				Cost Account
		1957-61	1967-71	1978	1979	1979
Hay	tons	1.9	2.2	2.1	2.3	2.9
Corn silage	tons	11	14	13.0	13.0	14.6
Corn grain	bu.	57	85	79	85	99
Oats	bu.	52	60	59	62	67
Wheat	bu.	32	39	35	41	47
Milk per cow	lbs.	7,914	10,361	11,488	11,800	15,372

*Source: New York Agricultural Statistics, 1979; Crop Reporting Service, USDA.

FARM COST ACCOUNT SUMMARY, 1979

Crop Enterprises

Crop	Number of enterprises	Average acres per enterprise	Yield per acre	Hours of labor per acre*	Return per		Profit per acre	Profit on enterprise
					Hour of labor	Dollar of cost		
					\$	\$	\$	\$
<u>Forage:</u>								
Hay	19	76	2.9 tn	7	0.90	0.84	-30	-2,260
Hay crop silage	15	140	6.6 tn	5	0.39	0.87	-24	-3,417
Corn silage	18	122	14.6 tn	5	9.05	1.07	18	2,181
<u>Grain:</u>								
Corn for grain	9	98	99 bu	3	5.12	1.00	-1	-112
High moist. corn	13	138	3.8 tn	3	18.84	1.22	47	6,560
Oats	5	31	67 bu	3	-18.35	0.63	-53	-1,637
Wheat	13	131	47 bu	2	22.68	1.26	39	5,171
<u>Fruit:</u>								
Apples	12	111	540 bu	92	7.39	1.07	97	10,679
Red tart cherries	8	32	6,396 lb	66	33.16	2.80	1,892	59,734

* To grow and harvest the crop.

ENTERPRISE RATES OF RETURN
FARM COST ACCOUNT RECORDS, 1976-79

Enterprise	Return per hour of labor				Return per dollar of cost			
	1976	1977	1978	1979	1976	1977	1978	1979
	\$	\$	\$	\$	\$	\$	\$	\$
<u>Livestock:</u>								
Dairy cows	6.73	5.07	9.01	10.77	1.10	1.03	1.13	1.15
Dairy heifers	-2.90	-1.43	2.23	3.97	0.72	0.78	0.92	0.96
<u>Forage:</u>								
Hay	4.90	5.15	3.31	0.90	1.05	1.05	0.94	0.84
Hay crop silage	6.79	3.19	-2.52	0.39	1.09	0.96	0.79	0.87
Corn silage	5.10	6.73	4.46	9.05	1.03	1.07	0.98	1.07
<u>Grain:</u>								
Corn for grain	-0.32	-0.99	0.00	5.12	0.91	0.87	0.92	1.00
High moisture corn	5.80	7.10	6.98	18.84	1.04	1.07	1.04	1.22
Oats	-3.44	-17.76	-3.92	-18.35	0.80	0.54	0.77	0.63
Wheat	-0.23	-2.13	-4.11	22.68	0.88	0.84	0.75	1.26
<u>Fruits:</u>								
Apples	8.63	8.72	7.61	7.39	1.33	1.36	1.19	1.07
Sweet cherries	-0.98	7.32	7.45	NA	0.59	1.23	1.29	NA
Red tart cherries	21.18	17.71	43.59	33.16	1.91	1.64	3.43	2.80

Dairy Cows -

Dairy cow values continued to increase rapidly during the first half of 1979 and levelled off at about \$1,100 per head for the last half of the year. Compared to 1978, average dairy cow values for the year increased about 60 percent. Cull beef prices increased nearly 40 percent and bob calves increased over 50 percent for the second consecutive year. Bob calf prices exceeded \$100 per cwt. in May and June 1979 - an all time high.

Since these dairy enterprises represent commercial herds where herd dispersals are not a factor, cow values at the beginning of the year were adjusted upward to prevent unrealized capital gain from inflating dairy cow enterprise profits. Thus, 1979 profits on these dairy enterprises are not directly affected by the rapid increase in cow values during the year. However, profits are affected by the increase in cull beef and bob calf prices as dairymen disposed of livestock in the normal conduct of their herd management practices. Also, higher values for cows in the dairy herd resulted in higher interest charges for the investment in the cow.

DAIRY COWS, 1979
COSTS AND RETURNS PER DAIRY COW
2,851 COWS ON 19 COST ACCOUNT FARMS

ITEM	AVERAGE PER COW
COSTS:	
DEPRECIATION - - - - -	\$ 115
FEED - 4,521 LBS OF DRY GRAIN - - - - -	\$ 368
1.8 TONS OF HIGH MOISTURE CORN - - - - -	107
0.7 TONS OF HAY - - - - -	38
3.6 TONS OF HAY CROP SILAGE - - - - -	87
8.0 TONS OF CORN SILAGE - - - - -	153
PASTURE AND ALL OTHER FEED - - - - -	43
TOTAL FEED COST PER COW - - - - -	796
LABOR - 51 HOURS - - - - -	281
TRACTOR, TRUCK - - - - -	26
EQUIPMENT - - - - -	73
BEDDING - - - - -	13
BREEDING - - - - -	20
VET AND MEDICINE - - - - -	37
MILK HAULING - - - - -	49
MILK TESTING - - - - -	10
SUPPLIES - - - - -	21
UTILITIES - - - - -	23
INSURANCE - - - - -	6
INTEREST ON VALUE OF COW - - - - -	76
BUILDING USE - - - - -	73
ALL OTHER - - - - -	94
TOTAL OTHER THAN DEPREC, FEED, LABOR - - - - -	521
TOTAL COSTS - - - - -	\$ 1,713
RETURNS:	
15,295 POUNDS OF MILK SOLD - - - - -	\$1,865
77 POUNDS OF MILK USED ON FARM - - - - -	9
CALVES - - - - -	102
OTHER RETURNS - - - - -	2
TOTAL RETURNS - - - - -	\$ 1,978
PROFIT: - - - - -	\$ 265
OTHER FACTORS - AVG PER CWT OF MILK:	
ALL GRAIN COST	\$ 3.09
TOTAL FEED COST	5.18
LABOR COST	1.83
TOTAL COST	\$ 10.47
RETURNS	12.19
MILK PRODUCED PER HOUR OF LABOR	303 LB
RETURN PER HOUR OF LABOR	\$ 10.77
RETURN PER DOLLAR OF COST	1.15

FACTORS FROM 19 DAIRY COW ENTERPRISES
19 COST ACCOUNT FARMS, 1979
(ARRANGED BY NUMBER OF COWS)

FARM NO	HERD SIZE NO	MILK			FEED PER COW					VET MED COST/ COW \$
		MILK PER COW LB	LABOR PER COW HR	PER HR OF LABOR LB	DRY GRAIN LB	HIGH MSTR CORN TN	HAY CROP HAY TN	SILG SILG TN	CORN SILG TN	
834	486	14,547	46	319	1,551	3.3	.3	4.7	6.0	22
827	379	14,972	47	318	2,596	2.1	.2	4.0	6.7	37
812	284	18,460	41	455	6,873			1.8	10.3	73
806	239	15,997	37	434	7,799	2.0	.1	3.9	11.2	31
824	199	15,693	44	353	3,709	3.3	.4	6.1	5.6	46
830	157	15,764	51	309	4,662	1.2	1.5	3.5	8.3	62
804	155	14,957	43	347	7,265		.5	3.1	10.9	25
821	145	14,852	47	317	4,855	.2	.5	2.6	11.6	35
840	137	15,693	50	316	6,058		.2	5.5	11.3	25
835	119	15,876	49	326	5,647	2.8	1.1	3.2	7.6	52
105	119	14,314	68	212	2,605	4.7	.3	3.2	7.5	31
112*	75	14,543	78	185	5,413	.7	1.6	5.9	6.2	13
836	74	14,477	65	223	6,216		2.1		7.6	20
156*	55	12,807	57	224	5,091		3.4	.5	9.4	13
828*	51	13,749	81	170	941	4.5	1.4	4.5	3.6	72
843*	46	14,465	75	192	5,217		6.3		2.7	22
146*	45	12,758	129	99	4,667	2.9	1.3		3.6	31
108*	43	17,381	93	187	7,302		1.7	3.7	3.7	22
127*	43	15,107	49	307	6,140		1.7		12.0	33

1979 GROUP AVERAGES, ACCORDING TO NUMBER OF COWS:

THIRDS

HIGH	291	15,906	45	365	4,532	2.0	.5	4.0	8.1	45
MED	118	14,960	58	276	5,438	1.2	1.0	3.4	9.0	29
LOW	47	14,378	81	197	4,893	1.3	2.7	1.5	5.9	32

ANNUAL AVERAGES, ALL ENTR, WEIGHTED BY NUMBER OF COWS:

1979	150	15,372	51	303	4,521	1.8	.7	3.6	8.0	37
1978	142	15,051	50	300	4,357	1.5	.6	3.6	7.8	33
1977	130	14,344	54	264	4,272	1.7	.7	4.1	7.5	26
1976	128	14,455	55	263	4,586	1.3	.6	4.3	8.6	26
1975	140	14,515	51	287	4,394	1.3	.5	4.1	8.3	23

* STANCHION BAPNS

See note on page 8.

FACTORS FROM 19 DAIRY COW ENTERPRISES
19 COST ACCOUNT FARMS, 1979
(READ ACROSS BOTH PAGES)

AVG COST PER COW		AVG PER CWT OF		AVERAGE PER COW			RETURN PER HOUR \$		PROFIT ON		FARM NO.
EQR		MILK		RE- PRO-			OF OF		ENTER-		
FEED	LABOR	COST	RETURN	COST	TURN	EIT	LABOR	COST	PRICE		
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
654	247	9.40	12.10	1483	1875	392	14.01	1.26	190,721	834	
638	339	9.78	12.20	1573	1936	363	14.90	1.23	137,544	827	
886	296	10.06	11.84	1965	2295	330	15.42	1.17	93,695	812	
941	241	11.28	12.95	1883	2150	267	13.78	1.14	63,825	806	
790	227	10.02	11.52	1659	1893	234	10.41	1.14	46,747	824	
902	219	9.88	12.40	1729	2127	398	12.08	1.23	62,390	830	
914	277	11.30	12.99	1769	2022	253	12.29	1.14	39,199	804	
814	302	11.08	12.66	1748	1982	234	11.43	1.13	33,967	821	
899	254	9.97	12.10	1682	2015	333	11.80	1.20	45,627	840	
988	203	10.98	12.17	1861	2049	188	8.03	1.10	22,373	835	
840	315	12.19	12.04	1862	1841	21-	4.34	0.99	2,601-	105	
821	284	11.11	11.84	1721	1827	106	4.97	1.06	7,973	112	
575	505	11.80	12.16	1785	1837	52	8.57	1.03	3,818	836	
876	157	13.04	12.68	1720	1674	46-	1.94	0.97	2,514-	156	
667	370	11.74	11.72	1734	1730	4-	4.54	1.00	179-	828	
981	339	12.21	11.72	1863	1792	71-	3.56	0.96	3,262-	843	
695	467	12.96	11.73	1723	1565	158-	2.40	0.91	7,116-	146	
769	384	9.32	11.64	1703	2108	405	8.49	1.24	17,384	108	
871	238	11.47	12.45	1842	1989	147	7.85	1.08	6,346	127	

1979 GROUP AVERAGES, ACCORDING TO NUMBER OF COWS:

										THIRDS
802	262	10.07	12.17	1716	2046	331	13.43	1.20	99,154	HIGH
836	306	11.20	12.28	1776	1939	164	8.78	1.09	21,479	MED
810	326	11.79	11.99	1765	1810	46	4.80	1.03	1,777	LOW

ANNUAL AVERAGES, ALL ENIR, WEIGHTED BY NUMBER OF COWS:

796	281	10.47	12.19	1713	1978	265	10.77	1.15	39,786	1979
709	253	9.53	10.86	1501	1700	199	9.01	1.13	28,352	1978
695	229	9.58	9.90	1413	1460	47	5.07	1.03	6,085	1977
666	237	9.12	10.04	1356	1489	133	6.73	1.10	17,005	1976
625	209	8.26	9.02	1231	1341	110	6.29	1.09	15,361	1975

STANCHION BARN HERDS
DAIRY COWS, 1979
COSTS AND RETURNS PER DAIRY COW
358 COWS ON 7 COST ACCOUNT FARMS

ITEM	AVERAGE PER COW
<u>COSTS:</u>	
DEPRECIATION - - - - -	\$ 78
FEED - 4,922 LBS OF DRY GRAIN - - - - -	\$ 392
1.1 TONS OF HIGH MOISTURE CORN - - - - -	74
2.4 TONS OF HAY - - - - -	139
2.4 TONS OF HAY CROP SILAGE - - - - -	65
5.9 TONS OF CORN SILAGE - - - - -	119
PASTURE AND ALL OTHER FEED - - - - -	23
TOTAL FEED COST PER COW - - - - -	812
LABOR - 80 HOURS - - - - -	313
TRACTOR, TRUCK - - - - -	9
EQUIPMENT - - - - -	71
BEDDING - - - - -	26
BREEDING - - - - -	17
VET AND MEDICINE - - - - -	28
MILK HAULING - - - - -	45
MILK TESTING - - - - -	14
SUPPLIES - - - - -	31
UTILITIES - - - - -	28
INSURANCE - - - - -	6
INTEREST ON VALUE OF COW - - - - -	79
BUILDING USE - - - - -	64
ALL OTHER - - - - -	133
TOTAL OTHER THAN DEPREC, FEED, LABOR - - - - -	551
TOTAL COSTS - - - - -	\$ 1,754
<u>RETURNS:</u>	
14,255 POUNDS OF MILK SOLD - - - - -	\$1,705
82 POUNDS OF MILK USED ON FARM - - - - -	10
CALVES - - - - -	85
OTHER RETURNS - - - - -	6
TOTAL RETURNS - - - - -	\$ 1,806
<u>PROFIT:</u> - - - - -	\$ 52
<u>OTHER FACTORS - AVG PER CWT OF MILK:</u>	
ALL GRAIN COST	\$ 3.25
TOTAL FEED COST	5.66
LABOR COST	2.18
TOTAL COST	\$ 11.60
RETURNS	11.96
MILK PRODUCED PER HOUR OF LABOR	180 LB
RETURN PER HOUR OF LABOR	\$ 4.59
RETURN PER DOLLAR OF COST	1.03

FREESTALL BARN HERDS

13

DAIRY COWS, 1979
 COSTS AND RETURNS PER DAIRY COW
 2,493 COWS ON 12 COST ACCOUNT FARMS

ITEM	AVERAGE PER COW
COSTS:	
DEPRECIATION - - - - -	\$ 121
FELD - 4,463 LBS OF DRY GRAIN - - - - -	\$ 364
1.8 TONS OF HIGH MOISTURE CORN - - - - -	112
0.4 TONS OF HAY - - - - -	24
3.8 TONS OF HAY CROP SILAGE - - - - -	91
8.3 TONS OF CORN SILAGE - - - - -	158
PASTURE AND ALL OTHER FEED - - - - -	44
TOTAL FEED COST PER COW - - - - -	793
LABOR - 47 HOURS - - - - -	277
TRACTOR, TRUCK - - - - -	29
EQUIPMENT - - - - -	74
BEDDING - - - - -	11
BREEDING - - - - -	21
VET AND MEDICINE - - - - -	38
MILK HAULING - - - - -	49
MILK TESTING - - - - -	9
SUPPLIES - - - - -	19
UTILITIES - - - - -	22
INSURANCE - - - - -	6
INTEREST ON VALUE OF COW - - - - -	75
BUILDING USE - - - - -	74
ALL OTHER - - - - -	89
TOTAL OTHER THAN DEPREC, FEED, LABOR -	516
TOTAL COSTS - - - - -	\$ 1,707
RETURNS:	
15,444 POUNDS OF MILK SOLD - - - - -	\$1,888
77 POUNDS OF MILK USED ON FARM - - - - -	9
CALVES - - - - -	104
OTHER RETURNS - - - - -	2
TOTAL RETURNS - - - - -	\$ 2,003
PROFIT: - - - - -	\$ 296
OTHER FACTORS - AVG PER CWT OF MILK:	
ALL GRAIN COST	\$ 3.07
TOTAL FEED COST	5.11
LABOR COST	1.78
TOTAL COST	\$ 10.32
RETURNS	12.22
MILK PRODUCED PER HOUR OF LABOR	333 LB
RETURN PER HOUR OF LABOR	\$ 12.29
RETURN PER DOLLAR OF COST	1.17

See note on page 8.

FACTORS FROM 19 DAIRY COW ENTERPRISES
19 COST ACCOUNT FARMS, 1979
(ARRANGED BY NUMBER OF COWS)

FARM NO	HERD SIZE NO	MILK			FEED PER COW					VET MED COST/ COW \$
		MILK PER COW LB	LABOR PER COW HR	PER HR OF LABOR LB	DRY GRAIN LB	HIGH MSTR TN	HAY CROP TN	CORN SILG TN	CORN SILG TN	

7. STANCHION BARN HERDS:

112	75	14,543	78	185	5,413	.7	1.6	5.9	6.2	13
156	55	12,807	57	224	5,091		3.4	.5	9.4	13
828	51	13,749	81	170	941	4.5	1.4	4.5	3.6	72
843	46	14,465	75	192	5,217		6.3		2.7	22
146	45	12,758	129	99	4,667	2.9	1.3		3.6	31
108	43	17,381	93	187	7,302		1.7	3.7	3.7	22
127	43	15,107	49	307	6,140		1.7		12.0	33

ANNUAL AVERAGES, ALL ENTR. WEIGHTED BY NUMBER OF COWS:

1979	51	14,337	80	180	4,922	1.1	2.4	2.4	5.9	28
1978	51	14,178	89	160	3,741	1.4	1.7	3.6	4.4	30
1977	53	13,503	90	150	4,050	1.5	1.7	4.1	6.3	23
1976	48	13,530	92	147	5,224	.8	1.6	4.4	6.6	24
1975	55	12,178	78	156	3,034	1.5	1.4	4.5	5.5	15

See note on page 8.

12 FREESTALL BARN HERDS:

834	486	14,547	46	319	1,551	3.3	.3	4.7	6.0	22
827	379	14,972	47	318	2,596	2.1	.2	4.0	6.7	37
812	284	18,460	41	455	6,873			1.8	10.3	73
806	239	15,997	37	434	7,799	2.0	.1	3.9	11.2	31
824	199	15,693	44	353	3,709	3.3	.4	6.1	5.6	46
830	157	15,764	51	309	4,662	1.2	1.5	3.5	8.3	62
804	155	14,957	43	347	7,265		.5	3.1	10.9	25
821	145	14,852	47	317	4,855	.2	.5	2.6	11.6	35
840	137	15,693	50	316	6,058		.2	5.5	11.3	25
835	119	15,876	49	326	5,647	2.8	1.1	3.2	7.6	52
105	119	14,314	68	212	2,605	4.7	.3	3.2	7.5	31
836	74	14,477	65	223	6,216		2.1		7.6	20

ANNUAL AVERAGES, ALL ENTR. WEIGHTED BY NUMBER OF COWS:

1979	208	15,521	47	333	4,463	1.8	.4	3.8	8.3	38
1978	203	15,197	44	348	4,460	1.5	.4	3.6	8.3	33
1977	193	14,534	46	314	4,322	1.7	.5	4.1	7.8	27
1976	188	14,632	48	306	4,463	1.4	.5	4.2	9.0	26
1975	194	14,935	46	326	4,638	1.3	.3	4.1	8.9	24

See note on page 8.

FACTORS FROM 19 DAIRY COW ENTERPRISES
19 COST ACCOUNT FARMS, 1979
(READ ACROSS BOTH PAGES)

15

AVG COST		AVG PER		AVERAGE			RETURN PER		PROFIT	
PER COW		CWT OF		PER COW			HOUR		ON	
FOR		MILK		RE- PRO-			OF		ENTER-	
FEED	LABOR	COST	RETURN	COST	TURN	FI	LABOR	COST	RISE	FARM
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	NO.

7 STANCHION BARN HERDS:

821	284	11.11	11.84	1721	1827	106	4.97	1.06	7,973	112
876	157	13.04	12.68	1720	1674	46-	1.94	0.97	2,514-	156
667	370	11.74	11.72	1734	1730	4-	4.54	1.00	179-	828
981	339	12.21	11.72	1863	1792	71-	3.56	0.96	3,262-	843
695	467	12.96	11.73	1723	1565	158-	2.40	0.91	7,116-	146
769	384	9.32	11.64	1703	2108	405	8.49	1.24	17,384	108
871	238	11.47	12.45	1842	1989	147	7.85	1.08	6,346	127

ANNUAL AVERAGES, ALL ENTR, WEIGHTED BY NUMBER OF COWS:

812	313	11.60	11.96	1754	1806	52	4.59	1.03	2,662	1979
669	310	10.25	10.47	1519	1550	31	3.83	1.02	1,566	1978
709	300	10.77	9.67	1493	1345	148-	1.69	0.90	7,911-	1977
666	305	10.28	9.76	1426	1357	69-	2.55	0.95	3,333-	1976
570	275	9.77	8.71	1214	1085	129-	1.88	0.89	7,062-	1975

12 FREESTALL BARN HERDS:

654	247	9.40	12.10	1483	1875	392	14.01	1.26	190,721	834
638	339	9.78	12.20	1573	1936	363	14.90	1.23	137,544	827
886	296	10.06	11.84	1965	2295	330	15.42	1.17	93,695	812
941	241	11.28	12.95	1883	2150	267	13.78	1.14	63,825	806
790	227	10.02	11.52	1659	1893	234	10.41	1.14	46,747	824
902	219	9.88	12.40	1729	2127	398	12.08	1.23	62,390	830
914	277	11.30	12.99	1769	2022	253	12.29	1.14	39,199	804
814	302	11.08	12.66	1748	1982	234	11.43	1.13	33,967	821
899	254	9.97	12.10	1682	2015	333	11.80	1.20	45,627	840
988	203	10.98	12.17	1861	2049	188	8.03	1.10	22,373	835
840	315	12.19	12.04	1862	1841	21-	4.34	0.99	2,601-	105
575	505	11.80	12.16	1785	1837	52	8.57	1.03	3,818	836

ANNUAL AVERAGES, ALL ENTR, WEIGHTED BY NUMBER OF COWS:

793	277	10.32	12.22	1707	2003	296	12.29	1.17	61,442	1979
716	244	9.42	10.92	1498	1726	228	10.78	1.15	46,209	1978
692	213	9.33	9.95	1395	1486	91	6.56	1.06	17,538	1977
666	224	8.91	10.09	1343	1515	172	8.28	1.13	32,259	1976
635	197	8.05	9.07	1234	1387	153	7.64	1.12	29,631	1975

HEIFERS, 1979
COSTS PER HEIFER EQUIVALENT
880 MATURE-HEIFER EQUIVALENTS ON
18 COST ACCOUNT FARMS*

ITEM	AVERAGE PER HEIFER RAISED TO 29 MONTHS
VALUE OF CALF AT BIRTH - - - - -	\$ 140
FEED - MILK AND MILK REPLACER- - - - -	\$ 18
2,305 POUNDS OF DRY GRAIN - - - - -	160
.6 TONS OF HIGH MOISTURE CORN- - - - -	34
1.3 TONS OF HAY - - - - -	72
1.9 TONS OF HAY CROP SILAGE - - - - -	47
7.0 TONS OF CORN SILAGE - - - - -	131
PASTURE AND ALL OTHER FEED- - - - -	50
TOTAL FEED COST- - - - -	512
LABOR - 29 HOURS - - - - -	157
TRACTOR, TRUCK - - - - -	32
EQUIPMENT- - - - -	13
BEDDING- - - - -	19
BREEDING - - - - -	10
VET AND MEDICINE - - - - -	8
UTILITIES- - - - -	4
INSURANCE- - - - -	6
INTEREST - - - - -	94
BUILDING USE - - - - -	61
ALL OTHER- - - - -	62
TOTAL OTHER THAN CALF, FEED, LABOR - - - - -	309
TOTAL COSTS - TO RAISE A HEIFER TO 29 MONTHS OF AGE- - -	\$1118

*THERE WERE A TOTAL OF 2,157 HEIFERS OF ALL AGES ON THESE FARMS FOR A PART OR ALL OF THE YEAR. THEY WERE FED A TOTAL OF 25,512 NET HEIFER-MONTHS, WHICH, DIVIDED BY 29, EQUALS 880 MATURE-HEIFER EQUIVALENTS. (HEIFERS RAISED ON CONTRACT ARE NOT INCLUDED.)

FACTORS FROM 18 HEIFER ENTERPRISES
18 COST ACCOUNT FARMS, 1979
(ARRANGED BY NUMBER OF HEIFERS)

17

FARM NO	NUMBER OF HEIFERS	LABOR PER HEIFER HR	AVERAGE AGE AT FRESHENING MO	NET COST* PER HEIFER MONTH \$	PER HEIFER AT FRESHENING COST \$	PER HEIFER AT FRESHENING VALUE \$	RETURN PER HOUR OF LABOR \$	PER \$ OF COST
834	469	7	27	32	1,018	1,000	4.39	0.98
827	330	11	25	32	926	800	4.55	0.94
824	170	16	27	40	1,185	1,250	8.06	1.11
830	154	16	26	48	1,463	850	9.90-	0.67
806	139	9	26	28	879	1,000	15.04	1.18
821	134	9	29	25	806	800	2.67	0.90
840	113	14	31	34	1,209	1,000	9.63	1.13
105	106	23	26	34	1,039	1,000	2.28	0.88
804	92	9	26	31	926	900	16.58	1.21
835	89	13	25	35	1,006	1,000	5.70	1.04
112	66	13	26	34	986	1,100	7.57	1.11
836	65	15	33	26	963	900	9.59	1.08
146	46	25	25	32	909	796	1.07	0.85
828	46	8	26	20	602	693	4.27	0.99
127	41	10	26	39	1,194	1,200	12.46	1.15
108	39	21	29	39	1,240	775	1.99	0.91
156	32	19	38	51	1,992	1,200	9.92-	0.62
843	26	16	25	52	1,490	1,000	17.81-	0.46

1979 GROUP AVERAGES, ACCORDING TO NUMBER OF HEIFERS:

THIRDS

HIGH	233	12	27	34	1,047	951	4.14	0.96
MED	89	15	28	32	1,022	984	8.56	1.08
LOW	38	17	28	39	1,238	945	1.31-	0.83

ANNUAL AVERAGES- ALL ENIR, WEIGHTED BY NUMBER OF HEIFERS:

1979	120	12	27	34	1,048	960	3.97	0.96
1978	124	12	27	29	862	789	2.23	0.92
1977	113	13	27	25	739	605	1.43-	0.78
1976	108	12	28	24	734	566	2.90-	0.72
1975	115	12	28	23	705	523	3.58-	0.69

* VALUE OF CALF EXCLUDED

Note - Costs to raise heifers continued to increase rapidly in 1979. As in 1978, returns on the 1979 heifer enterprises were enhanced by a significant increase (over 20 percent) in the market value of ready-to-freshen heifers during the year.